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Animal Production Science

Supplementary Material

Enhancing gut health and performance of grower-finisher pigs: assessing the efficacy of the mixture of microencapsulated essential oils and saponins

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Table S1. Performance analysis by calculating the mean and standard deviation (SD)

Week	Treatment	Mean	SD	No. of pigs
8	Ctr	29.271	4.551	48
	Phy	29.667	3.983	50
14	Ctr	68.467	6.458	45
	Phy	68.255	6.289	50
17	Ctr	87.833	8.421	48
	Phy	87.708	7.912	48

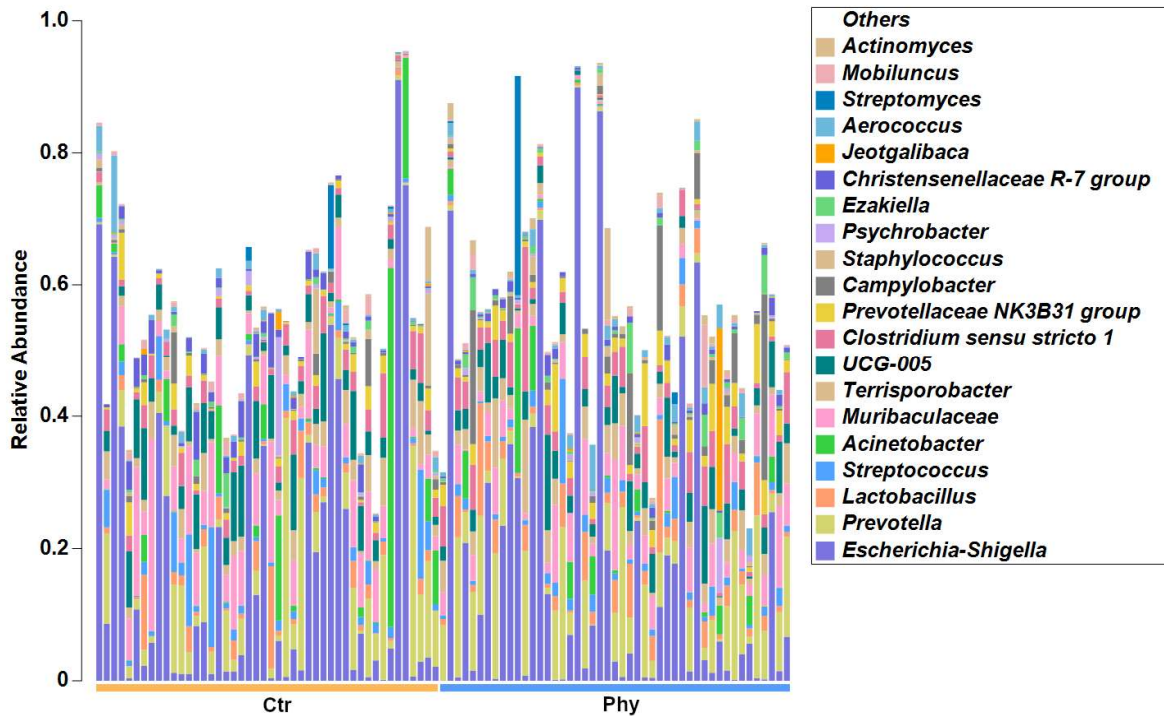


Figure S1. Relative abundance of the top 20 most prevalent genera at week 17

Table S2. Multivariate analysis by PERMANOVA to investigate sample-to-sample distance.

Measures	Groups	P value	Significance
Weighted UniFrac	Age	0.001	***
	Treatment	0.097	
	Origin	0.001	***
	Treatment x Age	0.002	**
	Treatment x Origin	0.105	
Unweighted UniFrac	Age	0.001	***
	Treatment	0.01	**
	Origin	0.001	***
	Treatment x Age	0.001	***

Phylum level Bray-Curtis	Treatment x Origin	0.001	***
	Age	0.001	***
	Treatment	0.051	
	Origin	0.001	***
	Treatment x Age	0.017	*
	Treatment x Origin	0.15	
Genus level Bray-Curtis	Age	0.001	***
	Treatment	0.016	*
	Origin	0.001	***
	Treatment x Age	0.003	**
	Treatment x Origin	0.047	*

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

Table S3. Paired comparisons of treatment and age using PAIRED MANOVA analysis

Measures	Groups	t	P value	Significance
Weighted UniFrac	W8: Ctr x Phy	1.2071	0.203	
	W14: Ctr x Phy	2.3195	0.001	***
	W17: Ctr x Phy	1.1513	0.192	
Unweighted UniFrac	W8: Ctr x Phy	1.3308	0.29	
	W14: Ctr x Phy	1.6882	0.002	**
	W17: Ctr x Phy	1.2751	0.045	*

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

Table S4. Paired comparisons of treatment and origin using PAIRED MANOVA analysis

Measures	Groups	t	P value	Significance
Weighted UniFrac	Ctr.Fec x Phy.Fec	1.1788	0.198	
	Ctr.Ile x Phy.Ile	1.2018	0.196	
	Ctr.Jej x Phy.Jej	0.94709	0.474	
	Ctr.Cec x Phy.Cec	1.1759	0.238	
	Ctr.Col x Ctr.Col	0.93194	0.56	
	Ctr.Duo x Ctr.Duo	1.1513	0.302	
Unweighted UniFrac	Ctr.Fec x Phy.Fec	1.4761	0.002	**
	Ctr.Ile x Phy.Ile	1.3374	0.094	
	Ctr.Jej x Phy.Jej	1.0208	0.293	
	Ctr.Cec x Phy.Cec	1.1216	0.235	
	Ctr.Col x Ctr.Col	1.0124	0.389	
	Ctr.Duo x Ctr.Duo	0.89405	0.558	

** $p < 0.01$